

CLAIMS

1. A method of loading at least one file (F_i) or a part ("clip") (C_i) thereof from a unit (FU) comprising files (F_i) or clips (C_i) thereof over an interface (IF) to a data-processing unit (DU), the method comprising
5 determining joint probabilities (JP_i) of at least two files (F_i) or clips (C_i) thereof, which joint probabilities express probabilities with which one moves to said files (F_i) or clips (C_i) thereof,

characterized by

- 10 determining energy consumptions (W_i) caused by the loading of said at least two files (F_i) or clips (C_i) thereof over the interface (IF);

forming a loading order for said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i);

- 15 determining a value for maximum energy consumption (EC_{MAX}), the value expressing the greatest allowed energy consumption caused by said loading;

loading files (F_i) or clips (C_i) thereof in said loading order and determining total energy consumption (ΣW_i) caused by the loading until the value of said total energy consumption (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).

- 20 2. A method according to claim 1,

characterized by

determining loading probabilities (LP_i) of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i).

3. A method according to claim 2,

- 25 **characterized by**

determining loading probability functions (fLP_i) of said files (F_i) or clips thereof as a function of the loading probabilities (LP_i).

4. A method according to claim 2,

characterized by

- 30 determining loading probability functions (fLP_i) of said files (F_i) or clips (C_i) thereof as a function of the loading probabilities (LP_i) and the energy consumptions (W_i) caused by the loading.

5. A method according to any one of the preceding claims,

characterized by

redetermining the value of said energy consumptions (W_i), maximum energy consumption (EC_{MAX}) and joint probabilities (JP_i) periodically.

6. A method according to any one of the preceding claims,
characterized by

5 redetermining the values of said maximum energy consumption (EC_{MAX}) according to the interface (IF) in question.

7. A method according to claim 5 or 6,

characterized by

10 updating the values of said loading probabilities (LP_i) and loading probability functions (fLP_i) as a response to said determination.

8. A method according to any one of the preceding claims,

characterized by

15 loading at least one file (F_i) or a clip (C_i) thereof over said interface (IF) alternatively from a server (S) to a terminal (T) or from a first memory component (100) to a second memory component (102).

9. A method according to any one of the preceding claims,

characterized by

20 loading at least one file (F_i) or a clip (C_i) thereof over said interface (IF) alternatively from a first terminal (T_1) to a second terminal (T_2) over a local network interface (LIF).

10. A method according to any one of the preceding claims,

characterized by

25 loading at least one file (F_i) or a clip (C_i) thereof from a mass memory component (830) to another memory component (836) over an internal interface.

11. A method of loading at least one file (F_i) or a clip (C_i) thereof from a unit (FU) comprising files (F_i) or clips (C_i) thereof over an interface (IF) to a data-processing unit (DU), the method comprising determining joint probabilities (JP_i) of at least two files (F_i) or clips (C_i) thereof, which joint probabilities express probabilities with which one moves to said files (F_i) or clips (C_i) thereof,

characterized by

35 forming a loading order for said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i);

determining a threshold value (TH), which expresses a value, which the value determined as a function of the joint probability of the file (F_i) or a clip

(C_i) thereof must at least reach in order for the file (F_i) or a clip (C_i) thereof to be loaded;

loading files (F_i) or clips (C_i) thereof in said loading order and comparing the values determined as functions of the joint probabilities of the files (F_i) or clips (C_i) thereof with the threshold value (TH) until the value
5 determined as the function of the joint probability (JP_i) of the file (F_i) or a clip (C_i) thereof is smaller than the threshold value (TH).

12. A system for loading at least one file (F_i) or a clip (C_i) thereof from a unit (FU) comprising files (F_i) or clips (C_i) thereof over an interface (IF)
10 to a data-processing unit (DU), the system comprising means for determining joint probabilities (JP_i) of at least two files (F_i) or clips (C_i) thereof, which joint probabilities express probabilities with which one moves to said files (F_i) or clips thereof (C_i),

characterized in that the system comprises
15 means for determining the energy consumption (W_i) caused by the loading of said at least two files (F_i) or clips (C_i) thereof;

means for determining the loading order of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i);

means for determining the value of maximum energy consumption
20 (EC_{MAX}), which expresses the greatest allowed energy consumption caused by said loading; and

means for loading files (F_i) or clips (C_i) thereof and determining the total energy consumption (ΣW_i) caused by the loading of the files (F_i) or clips (C_i) thereof, the means being arranged to load files (F_i) or clips (C_i) thereof until
25 the value of the total energy consumption (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).

13. A system according to claim 12,

characterized in that
at least part of said means is executed as a program code of a
30 driver (DR) comprised by the system.

14. A device for loading at least one file (F_i) or a clip (C_i) thereof from a unit (FU) comprising files (F_i) or clips (C_i) thereof over an interface (IF), the device comprising means for determining joint probabilities (JP_i) of at least two files (F_i) or clips (C_i) thereof, which joint probabilities express probabilities
35 with which one moves to said files (F_i) or clips (C_i) thereof,

characterized in that the device comprises

means for determining the energy consumptions (W_i) caused by the loading of said at least two files (F_i) or clips (C_i) thereof;

means for determining the loading order of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i);

5 means for determining the value of maximum energy consumption (EC_{MAX}), which expresses the greatest allowed energy consumption caused by said loading; and

means for requesting files (F_i) or clips (C_i) thereof and determining the total energy consumption (ΣW_i) caused by the loading, the means being
10 arranged to load files (F_i) or clips (C_i) thereof until the value of said total energy consumption (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).

15. A device for forming the loading order of at least two files (F_i) or clips (C_i) thereof for loading functionality performed over an interface (IF),

15 **characterized** in that the device comprises:

means for determining the energy consumption (W_i) caused by the loading of said at least two files (F_i) or clips (C_i) thereof, and

means for determining the loading order of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i).

20 16. A device for controlling the loading of at least two files (F_i) or clips (C_i) thereof performed over an interface (IF),

characterized in that the device comprises:

means for determining the value of maximum energy consumption (EC_{MAX}), which expresses the greatest allowed energy consumption caused by
25 said loading, and for determining the total energy consumptions (ΣW_i) caused by the loading of said files (F_i) or clips (C_i) thereof until the value of said total energy consumption (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).

17. A device according to any of claims 14 – 16,

30 **characterized** in that the device comprises:

proxy functionality, which is arranged to transmit at least one file (F_i) or a clip (C_i) thereof to another data-processing unit (DU) as a response to a request from the data-processing unit (DU).

35 18. A software product for loading at least one file (F_i) or a clip (C_i) thereof from a unit (FU) comprising files (F_i) or clips (C_i) thereof over an interface (IF) to a data-processing unit (DU), the software product comprising a

software code for determining joint probabilities (JP_i) of at least two files (F_i) or clips (C_i) thereof, with which probabilities one moves to said files (F_i) or clips (C_i) thereof,

characterized in that said software product comprises:

5 a software code for determining the energy consumptions (W_i) caused by said at least two files (F_i) or clips (C_i) thereof,

a software code for forming the loading order of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i);

10 a software code for determining the value of the maximum energy consumption (EC_{MAX}), which expresses the greatest allowed energy consumption caused by said loading; and

a software code for loading files (F_i) or clips (C_i) thereof and determining the total energy consumption (ΣW_i) caused by the loading of said files (F_i) or clips (C_i) thereof until the value of said total energy consumption
15 (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).

19. A software product for forming the loading order of at least two files (F_i) or clips (C_i) thereof for loading functionality to be performed over an interface (IF),

characterized in that said software product comprises:

20 a software code for determining the energy consumptions (W_i) of said at least two files (F_i) or clips (C_i) thereof; and

a software code for forming the loading order of said files (F_i) or clips (C_i) thereof as a function of said joint probabilities (JP_i).

20. A software product for controlling the loading of at least two files
25 (F_i) or clips (C_i) thereof to be performed over an interface (IF),

characterized in that the software product comprises:

a software code for determining the value of the maximum energy consumption (EC_{MAX}), which expresses the greatest allowed energy consumption caused by said loading; and

30 a software code for loading files (F_i) or clips (C_i) thereof and determining the total energy consumption (ΣW_i) caused by the loading of said files (F_i) or clips (C_i) thereof until the value of said total energy consumption (ΣW_i) exceeds the value of the maximum energy consumption (EC_{MAX}).